Project A-787

THE ADVANTAGES OF MANUFACTURING ASPHALT AND VINYL ASBESTOS FLOOR TILE IN SAVANNAH

Prepared for

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Foreword

The growing southeastern market for asphalt and vinyl asbestos floor tile, which is now served by manufacturers outside the Southeast, provides an attractive branch plant opportunity for manufacturers of these products.

This study is an adaptation of an Area Redevelopment Administration Report for Carroll County, Georgia, and was prepared for the Savannah District Authority as part of a comprehensive program of technical assistance for the economic development of Savannah and Chatham County. It is concerned with opportunities for diversifying the industrial economy of Chatham County and building on Savannah's existing industrial complex and resources.

The report examines the advantages of establishing an asphalt and vinyl asbestos floor tile plant in Savannah. The attractiveness of this opportunity is enhanced by Savannah's location in relation to the growing southeastern market and the availability of a high-quality labor pool characterized by exceptionally good labor-management relations.

Requests for additional information and comments or questions on this report are invited. Upon request from interested companies, individual case studies can be prepared which will include market penetration data and analyses of the effect of a new plant's production upon existing plants in a system.

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Summary

The annual market for asphalt and vinyl asbestos floor tile in the six southeastern states[1/] was over $17.5 million in 1962 and should increase to almost $23 million by 1968. None of the asphalt and vinyl asbestos floor tile used in the Southeast is manufactured in the Southeast. Major producers are located in the Northeast, Midwest, and Southwest, and finished products are shipped into the area at a freight cost of almost one cent per tile.

A Savannah manufacturer of asphalt and vinyl asbestos floor tile with annual sales of $4.5 million could save from $18,000 to $153,000 in freight costs and from $14,000 to $67,500 in production labor costs over existing manufacturing locations. In addition to these cost savings, the Savannah area contains a moderate surplus of highly productive labor and a good work stoppage record. First- and second-morning delivery service is available to most of the southeastern market, and multi-product shipments are already being used to advantage by existing companies.

1/ Alabama, Florida, Georgia, North Carolina, South Carolina, and Tennessee.

INTRODUCTION

This study is intended to evaluate the advantages of manufacturing asphalt and vinyl asbestos tile in Savannah, Georgia, and to compare these advantages with those of plants presently manufacturing floor tile for consumption in the Southeast. The report is directed toward manufacturers who supply asphalt and vinyl asbestos tile to the southeastern states.

The asphalt and vinyl asbestos floor tile industry is composed of a small number of multi-plant companies located in one or more of four sections of the U. S., all of which service a national market. (See Map 1.) The major producers in the industry are:

American Biltrite Rubber Company, Inc., Chelsea, Massachusetts
Armstrong Cork Company, Lancaster, Pennsylvania
Congoleum-Nairn, Inc., Kearny, New Jersey
Flintkote Company, New York, New York
Johns-Manville Corporation, New York, New York
Kentile, Inc., Brooklyn, New York
Ruberoid Company, New York, New York
Uvalde Rock Asphalt Company, San Antonio, Texas

Of these eight companies presently manufacturing asphalt and vinyl asbestos tile, three do not have a plant south of New Jersey or Illinois and two others have none east of Texas.

Tiles are priced f.o.b. manufacturing plants with freight equalized from all producing cities.

According to industry sources, competition between manufacturers of asphalt and vinyl asbestos floor tile is based more on product design and advertising than on price.

Distribution follows a straight-line product flow from the manufacturer to the wholesaler or large industrial builder, to the retailer, and finally to the consumer or small builder.

MAP 1

LOCATIONS OF PLANTS MANUFACTURING ASPHALT AND VINYL ASBESTOS FLOOR TILE

1. Watertown, Mass.
2. Newburgh, N.Y.
3. New York, N.Y.
4. Kearny, N.J.
5. Manville, N.J.
6. Trenton, N.J.
7. Lancaster, Pa.
8. Chillicothe, O.
9. Waukegan, Ill.
10. Chicago, Ill.
11. Chicago Heights, Ill.
12. Kankakee, Ill.
13. Jackson, Miss.
14. New Orleans, La.
15. Marrero, La.
16. Houston, Tex.
17. San Antonio, Tex.
18. Long Beach, Cal.
19. Torrance, Cal.
20. South Gate, Cal.
21. Los Angeles, Cal.

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THE MARKETS

National Market

More than $175 million worth of asphalt and vinyl asbestos tile was produced in the United States in 1962.[1/] This was a $32 million increase over the 1958 figure of $143 million and a $3 million increase over the 1961 figure of $172 million.

Since the builder is the predominant buyer of floor coverings, it is not unexpected to find a high coefficient of correlation (0.95) between the consumption of hard surface floor coverings and the volume of residential and nonresidential building construction in the United States. (See Appendix 1.) A first-degree projection for building construction (Figure 1) indicates a national construction total of approximately $53 billion for 1968. If the consumption of hard surface floor coverings continues to account for approximately 0.43% of total building construction, as it did in 1961, it can be assumed that the national consumption of asphalt and vinyl asbestos floor tile in 1968 will be approximately $228 million.

Southeastern Market[2/]

Asphalt and vinyl asbestos tile consumption in the Southeast is estimated by application of the very high correlation described above to construction in the Southeast. The estimate is supported by the amount of wholesale sales of floor coverings in the same area.

Consumption. The southeastern proportion of the valuation of authorized building permits issued (both private and public) in the United States has remained relatively constant for a number of years. The annual amounts and proportions are given in Table 1.

By using the high correlation between building construction and the consumption of asphalt and vinyl asbestos tile as an equating basis for the present southeastern market, a forecast can be made for the future market in the

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1/ U. S. Bureau of the Census, Annual Survey of Manufactures, 1962.

2/ For purposes of this study, the southeastern market includes the states of Alabama, Florida, Georgia, North Carolina, South Carolina, and Tennessee.

FIGURE 1
TREND OF RESIDENTIAL AND NONRESIDENTIAL BUILDING CONSTRUCTION IN THE U.S.

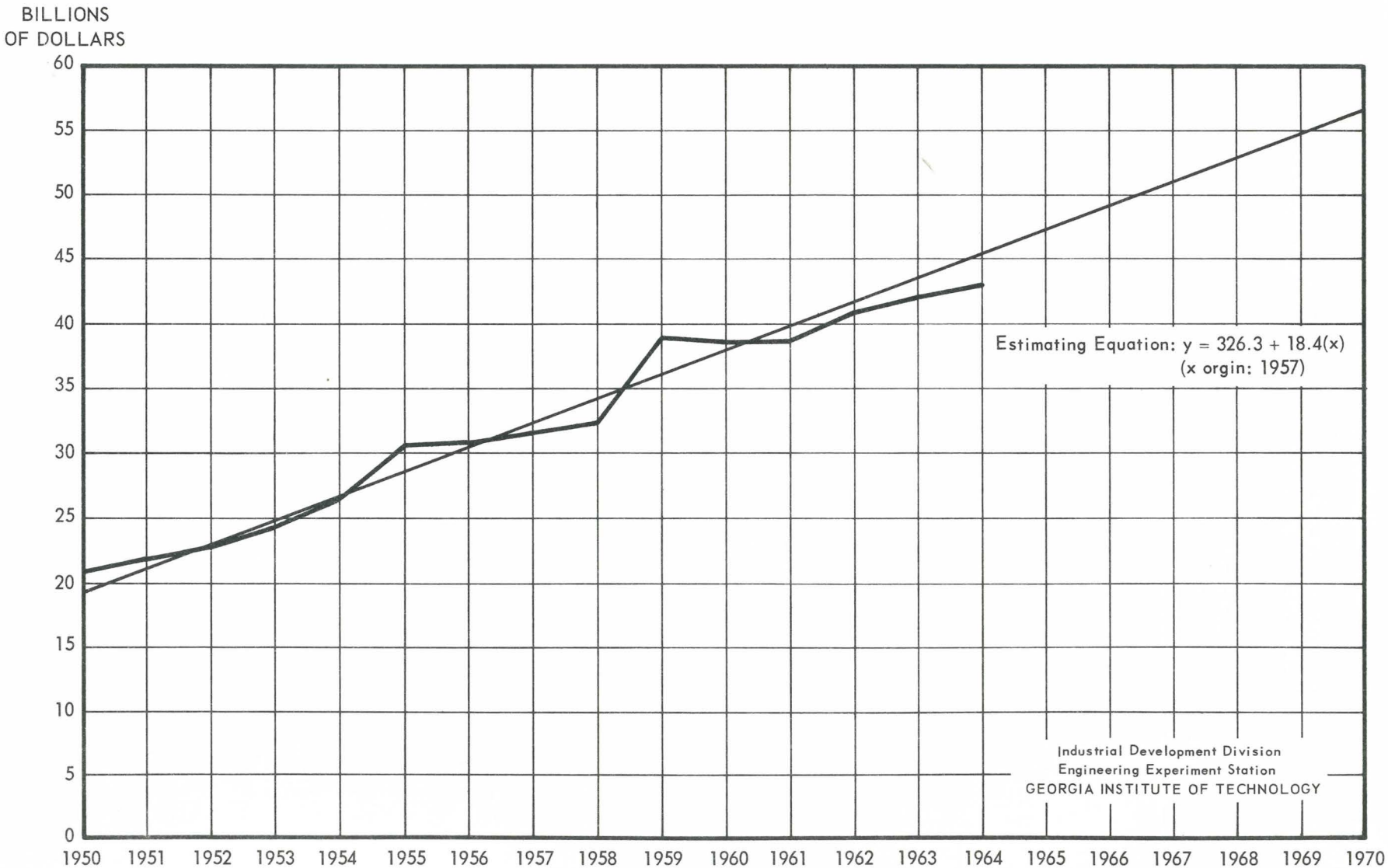


Table 1

TOTAL VALUE OF BUILDING PERMITS AUTHORIZED IN THE SOUTHEAST AS PERCENTAGE OF VALUE IN THE U. S., 1954-1964

Year	Building Permits Authorized (in millions of dollars) Southeast	United States	Southeast as Percent of U. S.
1954	1,513.9	16,485.0	9.2
1955	1,720.7	18,939.0	9.1
1956	1,769.4	18,787.8	9.4
1957	1,828.0	18,168.8	10.1
1958	2,047.2	20,089.9	10.2
1959	2,247.2	22,466.5	10.0
1960	2,983.2	17,833.4	10.5
1961	2,021.0	18,946.3	10.7
1962	2,093.3	20,576.7	10.2
1963	2,350.7	21,832.3	10.8
1964 (10 mos.)	2,172.4	19,478.6	11.1

Note: Figures for 1954-1959 include private and public building permits, while those for 1960-1964 include only private permits.

Source: U. S. Bureau of the Census, Construction Review, 1955-1965

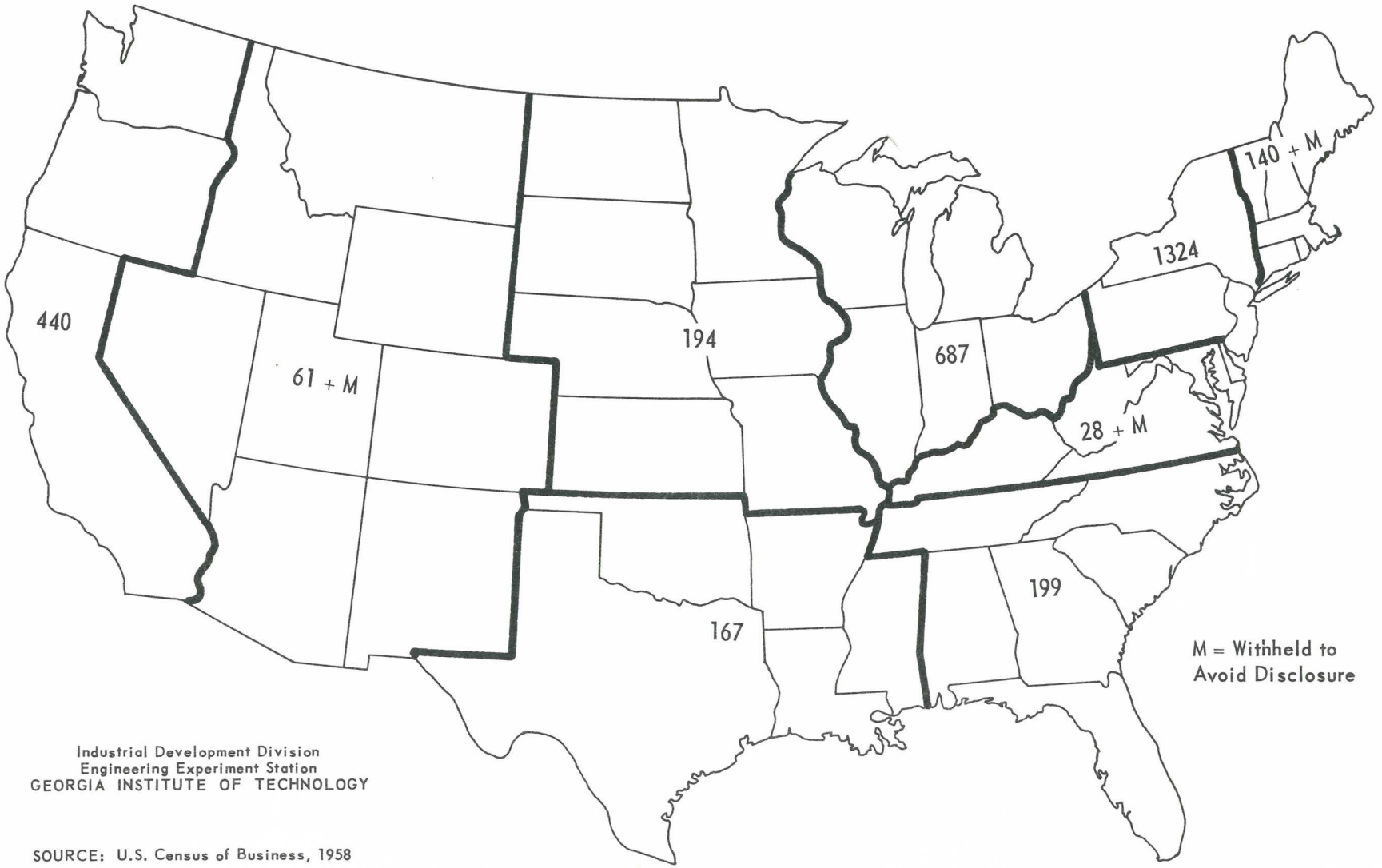
Southeast. Since building construction in the Southeast is over 10% of total construction in the U. S. (Table 1), it can be assumed that the southeastern market for asphalt and vinyl asbestos tile is greater than 10% of the national market. Based on this assumption, the market for asphalt and vinyl asbestos tile in the Southeast can be established at more than $17.5 million in 1962, and this market should increase to almost $23 million in 1968.

Wholesale Sales. The distribution of floor tile is accomplished through wholesalers of home furnishings and floor coverings. Only three areas in the United States wholesale more of these products than the Southeast. (See Map 2.) Each of these three areas has at least four asphalt and vinyl tile manufacturing plants; the Southeast has none. A fourth area, the Southwest, has five plants, yet wholesales less home furnishings and floor coverings than the southeastern states.

MAP 2

REGIONAL WHOLESALE SALES OF HOME FURNISHINGS AND FLOOR COVERINGS

(In Millions of Dollars)



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SOURCE: U.S. Census of Business, 1958

An attempt at calculating wholesale sales in the Southeast of floor coverings alone (Appendix 2) gives a figure of $78 million, or 12% of the national total. Although this figure is only an order-of-magnitude estimate and includes a quantity of carpeting, it compares favorably with the 10% obtained through the correlation between hard surface floor covering consumption and building construction.

ADVANTAGES OF A SAVANNAH LOCATION

An established market for asphalt and vinyl asbestos tile exists in the six southeastern states. Tiles for this market are produced primarily by plants in the Chicago, New York, and New Orleans areas and are shipped into the Southeast by truck.

An asphalt and vinyl asbestos tile manufacturer in Savannah can supply and service the southeastern market more economically and efficiently than existing plants because of:

1. faster delivery time,
2. multi-product shipments,
3. lower freight costs,
4. available high quality labor,
5. less likelihood of work stoppages, and
6. lower production labor costs.

Transportation

Serving Savannah are five railroads, three airlines, 53 motor carriers, 95 steamship lines through eight agencies, and 33 deepwater berths. The railways serving Savannah are shown in Table 2.

Delivery Time Savings. The large number of carriers creates competition for freight and tends to reduce rates somewhat as well as to improve service. Maps 3 and 4 indicate states served directly from Savannah and reflect normal freight transit times in days (or mornings), excluding day of pickup but including day (or morning) of delivery, on shipments from Savannah to various destinations by a majority of motor common carriers. Map 5 indicates the normal transit times on carload shipments from Savannah by railroad freight service. As indicated on the maps, first- and second-morning delivery service is available to most of the southeastern market.

Multi-Product Shipments. The established concentration of building products manufacturers in Savannah is shown in Table 3. This concentration has tended to create a building products distribution center in Savannah. Many national companies warehouse in Savannah building products manufactured elsewhere. These products complement the building products manufactured in Savannah. The prime example is fiber-glass insulation, warehoused by the three

Table 2

RAILWAYS SERVING SAVANNAH

Name and Home Office Address	States Served Directly
Atlantic Coast Line Railroad Co. 500 Water Street Jacksonville 2, Florida	Alabama, Florida, Georgia, North Carolina, South Carolina, Virginia
Central of Georgia Railway Co. 233 West Broad Street Savannah, Georgia	Alabama, Georgia, Tennessee
Savannah & Atlanta Railway 227 West Broad Street Savannah, Georgia	Georgia
Seaboard Air Line Railroad Co. 3600 West Broad Street Savannah, Georgia	Alabama, Florida, Georgia, North Carolina, South Carolina, Virginia
Southern Railway System 15th and K Streets Washington 13, D. C.	Alabama, Florida, Georgia, Illinois, Indiana, Kentucky, North Carolina, Tennessee, Virginia

asphalt roofing companies in Savannah for top-loading on roofing shipments. A similar system could be used in combining shipments of floor tile and fiber-glass insulation, resulting in either shipping both floor tile and fiber-glass insulation at a lower freight cost or shipping the top-loaded fiber-glass insulation virtually freight-free.

Freight Savings. Asphalt and vinyl asbestos tiles are shipped into the Southeast priced f.o.b. point of origin with freight cost equalized with the closest manufacturing plant to the city of destination. Freight costs can amount to almost one cent per tile, or 15% of the value of shipments.

A manufacturer of floor tile located in Savannah, Georgia, and selling to the southeastern market would enjoy substantial freight savings over present producers supplying the same area. The delivery costs from Savannah would be 45.7% less than those from Chicago, 46.6% less than from New York, and 4.6% less than from New Orleans. (See Appendix 3.)

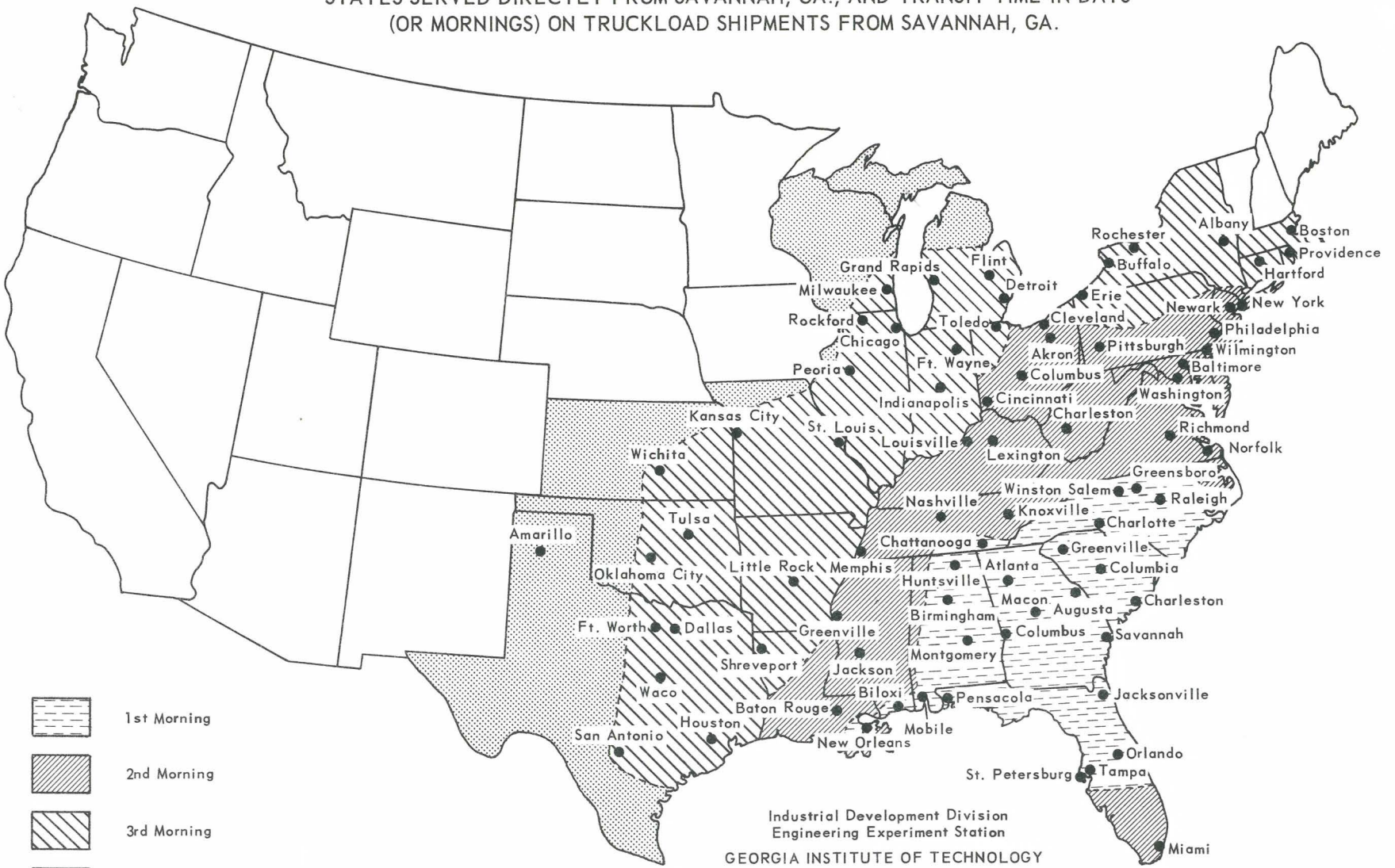
Over 185 million square yards of asphalt and vinyl asbestos floor tile, valued at over $175 million, were shipped by U. S. manufacturers in 1962.[1/]

1/ U. S. Bureau of the Census, Annual Survey of Manufactures, 1962.

MAP 3

TRUCKLOAD MOTOR FREIGHT SERVICE

STATES SERVED DIRECTLY FROM SAVANNAH, GA., AND TRANSIT TIME IN DAYS (OR MORNINGS) ON TRUCKLOAD SHIPMENTS FROM SAVANNAH, GA.



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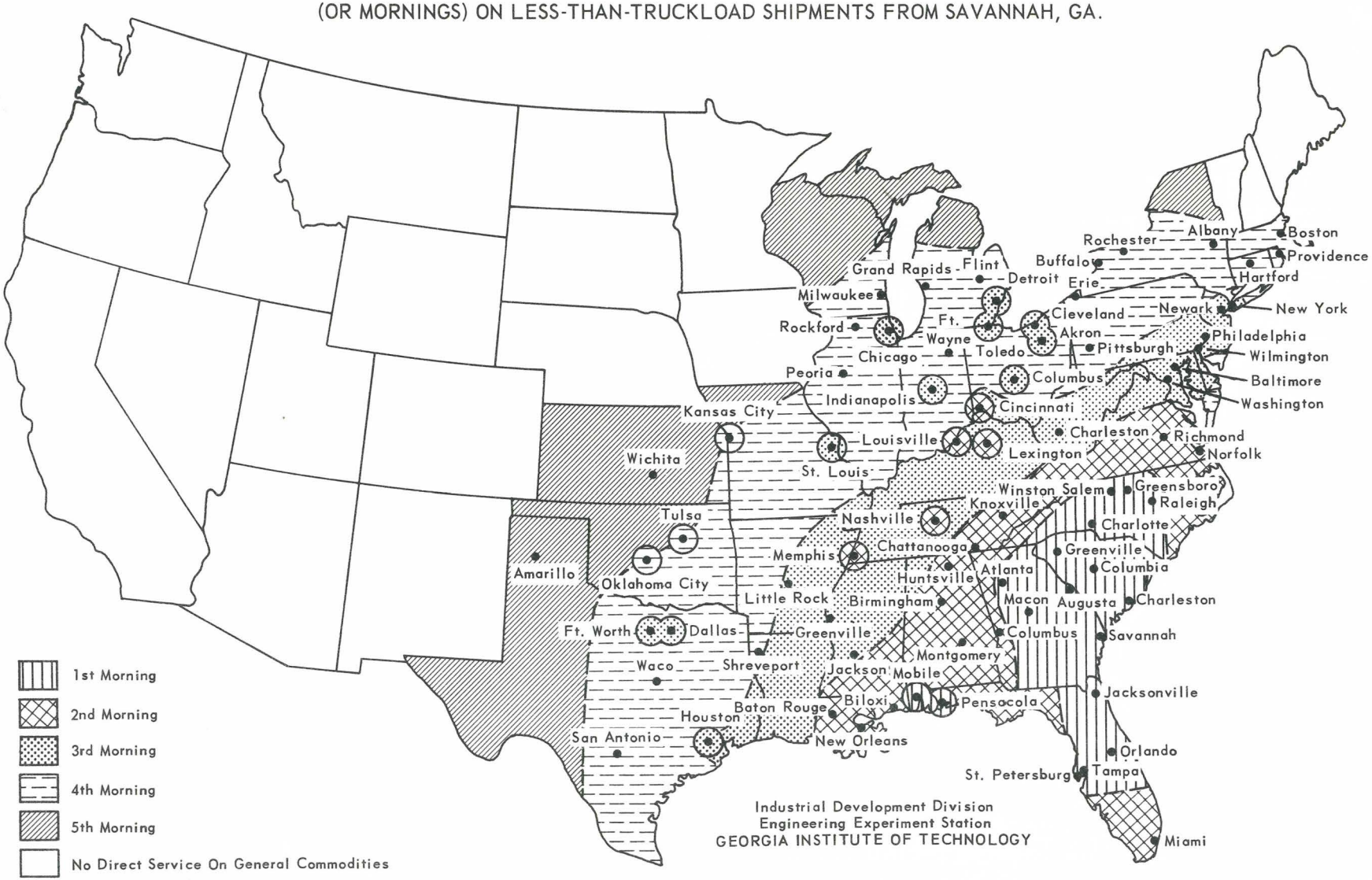
Normal motor freight transit time in days (mornings), excluding day of pick-up but including day (or morning) of delivery, on truckload shipments handled directly from Savannah, Ga., to destination by a majority of motor common carriers maintaining single-line service on general commodities.

MAP 4

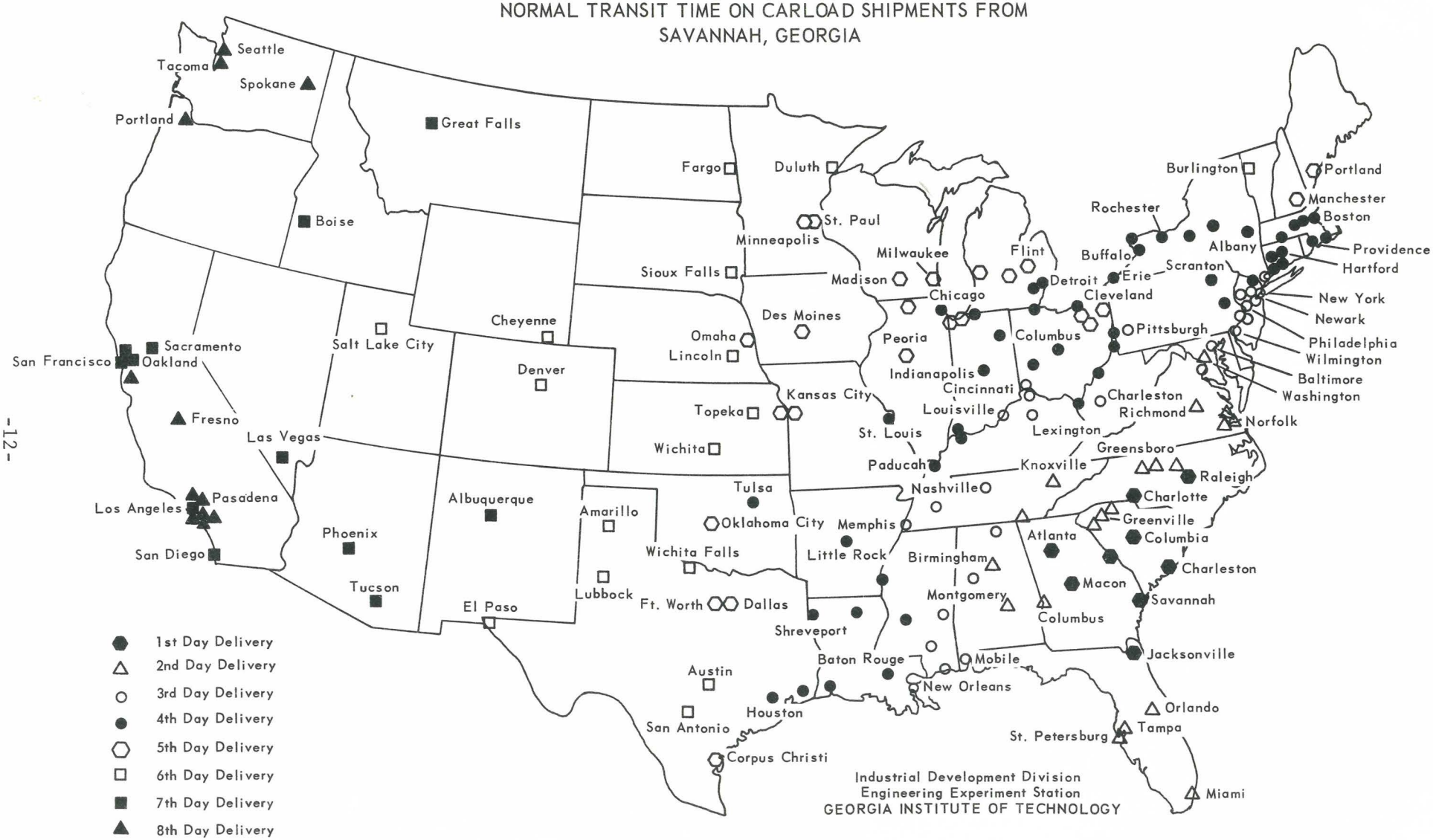
LTL MOTOR FREIGHT SERVICE

STATES SERVED DIRECTLY FROM SAVANNAH, GA., AND TRANSIT TIME IN DAYS (OR MORNINGS) ON LESS-THAN-TRUCKLOAD SHIPMENTS FROM SAVANNAH, GA.



Normal motor freight transit time in days (or mornings), excluding day of pick-up but including day (or morning) of delivery, on less-than-truckload shipments handled directly from Savannah, Ga., to destination by a majority of motor common carriers maintaining single-line service on general commodities.

MAP 5
RAILROAD FREIGHT SERVICE
NORMAL TRANSIT TIME ON CARLOAD SHIPMENTS FROM SAVANNAH, GEORGIA



Normal transit time in days, as shown on map, represents service from Savannah to destination city. Transit time is computed from, but not including, day the bill of lading is signed, to and including day car is delivered before 5 p.m. If a car must be switched from one railroad company to another within either the originating or destination city, an extra day is generally required for each switching operation.

Table 3

EXISTING BUILDING PRODUCTS MANUFACTURERS IN SAVANNAH[1/]

Company	Products
Atlantic Manufacturing Co.	Home components, panels, trusses
Bradley Plywood Corp.	Hardwood plywood, prefinished plywood panels, flush doors.
Cement Products Co.	Concrete blocks, septic tanks
Certain-teed Products Corp.	Asphalt roofing and building materials
Cut Art Stone Co.	Architectural cast stone and precast concrete
Flintkote Co.	Gypsum wallboard and other gypsum products
Georgia Pacific Corp.	Hardwood plywood, prefinished paneling
Johns-Manville Products Corp.	Asphalt roofing
Ken Block Co.	Concrete block
National Gypsum Co.	Gypsum lath, sheathing, wallboard, plaster
Neal-Blun Co.	Millwork, prehung doors, window components
Parker Concrete Pile Co.	Precast, prestressed concrete pilings
Reynolds and Manley Wood Preserving Co.	Kiln and air dried lumber, rough and dressed cypress, pine, hardwood, osmose pressure treated lumber
Ruberoid Co.	Asphalt roofing, dry felt
Savannah Paint Manufacturing Co.	Paints, varnishes
Savannah Planing Mill Co.	Lumber, millwork
Scott Concrete Pipe Co.	Concrete pipe
Southport Paint Co.	Paint, roof coatings
Wilmington Cabinet Co., Inc.	Cabinets, plastic items, store fixtures
Yetter Homes, Inc.	Prefabricated homes

1/ All companies listed have over 25 employees.

At these prices, a truckload of 2,500 square yards, or 30,000 pounds, would be worth almost $2,400. Therefore, a plant shipping $4.5 million in floor tile would dispatch about 1,875 truckloads during the year. If it is assumed that plants in Chicago, New York, New Orleans, and Savannah shipped the same volume (1,875 truckloads) of finished products to the same destinations in the Southeast, comparative annual freight costs may be calculated by multiplying the average rates to the Southeast from each producing city (Appendix 3) by size (hundreds of pounds) and number of truckloads as follows:

New York	$1.232 x 300 x 1,875 = $693,000
Chicago	$1.212 x 300 x 1,875 = $681,750
New Orleans	$0.690 x 300 x 1,875 = $388,125
Savannah	$0.658 x 300 x 1,875 = $370,125

A Savannah manufacturer shipping $4.5 million worth of asphalt and vinyl asbestos tile in the Southeast, therefore, would have a freight advantage of approximately $322,875 over a New York manufacturer, $311,625 over a Chicago manufacturer, and $18,000 over a New Orleans manufacturer.

The freight savings on finished products of a Savannah manufacturer would be offset to some degree by additional transportation costs on some raw materials, but the net savings still would be substantial. Fillers (clay, ground limestone, or ground sand plus asbestos) constitute the bulk of raw materials used in manufacturing asphalt and vinyl asbestos tile. All of these except asbestos are readily available in Georgia. Asbestos can be shipped to Savannah from Asbestos, Canada, by rail at water-competitive rates. The binder (coumarone-indene resins or vinyl resins) can be shipped from Florida, Pennsylvania, and Illinois by rail or truck.

The freight cost to Savannah for asbestos and binder is about the same as that to New Orleans, but is approximately $170,000 more than the freight cost to New York or Chicago. Therefore, the net freight savings for a Savannah manufacturer shipping $4.5 million worth of asphalt and vinyl asbestos tile in the Southeast would be $152,875 over a manufacturer in New York, $141,625 over one in Chicago, and $18,000 over a New Orleans producer.

The area in which a Savannah manufacturer would have a freight advantage over all existing plants covers all or a major portion of Florida, Georgia, North Carolina, South Carolina, and parts of Tennessee and Alabama. (See Map 6.)

MAP 6
FREIGHT ADVANTAGE AREA FOR A SAVANNAH ASPHALT AND
VINYL ASBESTOS TILE PLANT

Labor

Availability. The five-county Savannah labor market area contains a moderate labor surplus, according to a recent Georgia Department of Labor report. During the past year, unemployment ranged from 3.6% to 4.7% of the total civilian labor force in Savannah and Chatham County and stood at 4.0% (2,700 persons) in February 1965.[1/] Since the surrounding counties are primarily agricultural in character, they can be expected to add a substantial number of workers to the Savannah labor pool.

Productivity. Managers of Savannah branches of national manufacturers have indicated that the productivity of the local labor force is superior to that of other plants in their companies. They also have commented on the good attitude of their employees as demonstrated by their good labor relations, low turnover, low absenteeism, and good safety records. (See Appendix 4.)

Work Stoppage Record. In the floor tile industry, where a multi-shift operation is necessary for economical production, work stoppages are exceptionally costly. During 1960 the ratio of work stoppages to total working time in Georgia was 50% less than in Illinois, 75% less than in New York, and 28% less than in Louisiana.[2/]

The data in Table 4, prepared by the Savannah District Authority, show work stoppages and man-days idle in selected southern metropolitan areas. The figures in Table 4 point out graphically Savannah's outstanding record with respect to work stoppages, an indication of general labor climate.

Labor Cost Savings. Labor costs of a plant in Savannah would be significantly lower than those of existing plants which presently serve the Southeast. In 1964 the average hourly wage rates for production workers in manufacturing industries were:[3/]

Illinois	$2.76 per hour
New York	2.60 per hour
Louisiana	2.49 per hour
Savannah	2.43 per hour

1/ See monthly releases, Savannah Area Labor Market Trends, Employment Security Agency, Georgia Department of Labor.

2/ U. S. Department of Labor, 1961 Statistical Supplement -- Monthly Labor Review.

3/ U. S. Department of Labor, Employment and Earnings, 1964.

Table 4

WORK STOPPAGES IN SELECTED METROPOLITAN AREAS, 1950-1963[1/]

Metropolitan Area	Work Stoppages		Man-days Idle (all stoppages)
	Number	Workers Involved	
Birmingham, Ala.	415	193,750	5,022,300
Atlanta, Ga.	252	107,430	1,636,900
Mobile, Ala.	144	44,470	699,410
Chattanooga, Tenn.	190	45,740	643,500
Jacksonville, Fla.	109	17,880	398,450
Charlotte, N. C.	62	6,750	177,970
Augusta, Ga.	26	45,850	108,390
Charleston, S. C.	30	5,010	40,930
SAVANNAH, GA.	25	2,900	20,010

1/ Includes data for each of the metropolitan areas in which five stoppages or more began during each year of this period.

These wage rates indicate that average labor costs in Savannah would be 12% less than those in Illinois, 6.5% less than in New York, and 2.5% less than in Louisiana.

Production labor costs in asphalt and vinyl asbestos tile plants averaged 12.5% of the value of shipments in 1958.[1/] The labor cost savings of a Savannah manufacturer with annual shipments of $4.5 million can be roughly estimated by multiplying this average labor cost percentage by the value of shipments and then by Savannah's labor savings percentage over each location as follows:

Savannah over Illinois	0.125 x $4,500,000 x 0.12 = $67,500
Savannah over New York	0.125 x $4,500,000 x 0.065 = $36,565
Savannah over Louisiana	0.125 x $4,500,000 x 0.025 = $14,065

1/ U. S. Bureau of the Census, U. S. Census of Manufactures: 1958.

CONCLUSION

Although there is an expanding market in the Southeast for asphalt and vinyl asbestos floor tile, none is presently manufactured in the area.

A Savannah manufacturer of floor tile could supply the Southeast from an established building products manufacturing center and service the southeastern floor covering distributors more profitably than any present manufacturer. Significant savings are possible in distribution as well as production. In addition, Savannah's labor pool offers an adequate supply of high-quality labor with an outstanding work stoppage record.

A Savannah manufacturer of floor tile producing a $4.5 million annual volume for distribution in the Southeast could save from $32,065 to $209,125 in freight and labor costs each year. This saving is equivalent to an additional profit on sales of about 1% to 5%.

APPENDICES

Appendix 1

CORRELATION BETWEEN CONSUMPTION OF SELECTED HARD SURFACE FLOOR COVERINGS AND RESIDENTIAL AND NONRESIDENTIAL CONSTRUCTION

Year	X	Y	x (X-A)	y (Y-A)	xy	x^2	y^2
1950	245	206	-45	-110	4950	2025	12100
1951	248	218	-42	- 98	4116	1764	9604
1952	256	227	-34	- 89	3026	1156	7921
1953	261	244	-29	- 72	2088	841	5184
1954	250	266	-40	- 50	2000	1600	2500
1955	275	308	-15	- 8	120	225	64
1956	273	308	-17	- 8	136	289	64
1957	262	316	-28	0	0	784	0
1958	296	322	6	6	36	36	36
1959	342	390	52	74	3848	2704	5476
1960	331	382	41	66	2706	1681	4356
1961	326	384	36	68	2448	1296	4624
1962	343	419	53	103	5459	2809	10609
1963	355	440	65	124	8060	4225	15376
Sum	4063	4430			38993	21435	77914
Average (A)	290	316					

Number (N) = 14

$$\sigma_x = \sqrt{\frac{\sum x^2}{N}} = \sqrt{\frac{21435}{14}} = \sqrt{1531} = 39$$

$$\sigma_y = \sqrt{\frac{\sum y^2}{N}} = \sqrt{\frac{77914}{14}} = \sqrt{5565} = 75$$

$$\text{Coefficient: } r = \frac{\sum xy}{N\sigma_x\sigma_y} = \frac{38993}{14(39)(75)} = \frac{38993}{40950} = .95$$

Note: X = Selected hard surface floor coverings (linoleum, asphalt and vinyl asbestos tiles, and felt-base). (Source: U. S. Bureau of the Census, Statistical Abstract of the United States, 1958, 1962, 1965.)

Y = Residential and nonresidential construction. (Source: U. S. Bureau of the Census, Annual Survey of Manufactures, 1950 through present.)

Appendix 2

SALES OF FLOOR COVERINGS IN THE SOUTHEAST BY KIND OF WHOLESALER

	A											
Kind of Wholesaler	Ala.	Fla.	Ga.	N. C.	S. C.	Tenn.	B	x C	= D	x E	= F
Paint and Varnish	4.9	17.4	26.7	13.8	3.6	11.7	78.1	70	54.7	.7	383
Allied Chemicals	63.9	44.6	223.8	342.6	10.9	226.8	912.6	70	638.8	.1	639
Dry Goods	16.7	58.0	105.9	87.9	14.8	49.1	332.4	72	239.3	.1	239
Apparel	15.1	31.1	101.1	59.0	10.0	83.9	300.2	70	210.1	.3	630
Electrical Supplies	91.4	208.8	291.8	147.8	23.8	157.9	921.5	76	700.3	.1	700
Electrical Appliances	44.5	117.6	85.9	69.6	18.4	74.0	410.0	82	336.2	.7	2,354
Hardware	69.3	62.3	49.4	40.6	16.8	92.3	330.7	75	248.0	1.4	3,472
Plumbing and Heating	43.6	104.4	85.8	69.1	19.3	60.1	382.3	75	286.7	.1	287
Paper	3.4	19.4	8.4	21.6	-	23.4	76.2	81	61.7	.4	247
Paper Products	17.7	23.0	76.2	25.9	6.6	90.2	239.6	70	167.7	.1	168
Furniture	10.1	42.7	17.5	60.7	7.1	13.8	151.9	73	110.9	1.7	1,885
Home Furnishings	14.5	37.3	98.9	20.7	4.3	23.8	199.5	75	149.6	44.0	65,824
Lumber	81.4	132.9	86.3	119.5	33.6	81.9	535.6	70	374.9	.1	375
Construction Materials	104.8	165.6	137.2	61.6	23.7	63.2	556.1	70	389.3	.4	1,557
Total											78,760

Explanation of Column Headings:

A = Wholesale sales by states (in millions of dollars)
B = Total southeastern wholesale sales (in millions of dollars)
C = Ratio of specified sales to total sales (in percentages)
D = Sales of specified items (in millions of dollars)
E = Ratio of floor covering sales to total specified sales (in percentages)
F = Sales of floor coverings in the Southeast (in thousands of dollars)

Source: U. S. Bureau of the Census, U. S. Census of Business: 1958

Appendix 3

FREIGHT SAVINGS ON SHIPMENTS OF ASPHALT AND VINYL ASBESTOS FLOOR TILE FROM SAVANNAH TO SOUTHEASTERN WHOLESALERS
(in cents per 100 pounds)

	Minimum Truckload Commodity Rates FROM:			
TO:	Savannah(a)	Chicago	New York	New Orleans(e)
Atlanta	70*	115(b)	106(e)	62
Birmingham	95*	103(b)	137(e)	53
Durham	88*	130(c)	70(e)	99
Jacksonville	58*	157(b)	153(e)	81
Memphis	123*	77(d)	133(f)	56
Miami	104*	192(b)	200(e)	106
Nashville	110*	77(b)	117(f)	66

* - Class rates.

(a) Min. 22,000# (b) Min. 34,000# (c) Min. 27,000# (d) Min. 38,000#
(e) Min. 30,000# (f) Min. 36,000#

If it is assumed that shipments to the seven southeastern cities which wholesale the largest volume of floor coverings are representative of shipments to the entire Southeast, average freight rates from selected points of manufacture to the southeastern market can be determined by multiplying each southeastern city's share of floor coverings wholesale sales by the freight rate to that city from each manufacturing point. The sum of these figures is the average rate to the Southeast.

			Proportionate Share of Minimum Truckload Commodity Rates FROM:			
TO:	Annual Wholesale Sales ($million)[1/]	City's Share of Shipments (%)	Savannah	Chicago	New York	New Orleans
Atlanta	33.6	59.1	41.4	68.0	62.7	36.6
Birmingham	3.4	6.0	5.7	6.2	8.2	3.2
Durham	2.1	3.7	3.3	4.8	2.6	3.7
Jacksonville	3.0	5.3	3.1	8.3	8.1	4.3
Memphis	4.3	7.6	9.3	5.9	10.1	4.3
Miami	6.9	12.1	12.6	23.2	24.2	12.8
Nashville	3.5	6.2	6.8	4.8	7.3	4.1
	56.8	100.0				
Average Rate to the Southeast			82.2*	121.2	123.2	69.0

1/ U. S. Bureau of the Census, 1958 Census of Business -- Wholesale Trade.

* - Class rates.

To approximate Savannah commodity rates, decrease class rates by 20%: 82.2 x 0.80 = 65.8 (average commodity rate from Savannah to Southeast).

To compute Savannah freight savings: Over Chicago $\frac{121.2 - 65.8}{121.2} = 45.7\%$

Over New York $\frac{123.2 - 65.8}{123.2} = 46.6\%$ Over New Orleans $\frac{69.0 - 65.8}{69.0} = 4.6\%$

Appendix 4

BODIES OF TWO LETTERS WRITTEN TO THE SAVANNAH INDUSTRIAL DEVELOPMENT DIVISION FIELD OFFICE BY SAVANNAH PLANT MANAGERS OF NATIONAL CONCERNS

Dear Dr. Bankston:

We are writing this letter for the purpose of presenting to prospective locators in Savannah a picture of the quality of available labor.

The Savannah Plant of the _____ has a reputation throughout the Company for its unusually fine spirit. We have been praised many times for the excellence of our friendly and efficient cooperation with visitors working on various projects.

Savannah Plant holds top place in average production per hour on our _____ and our _____ lines, and has held it for years. The writer has had occasion to visit other plants in other cities, and is frequently struck by the comparison in favor of Savannah when observing the appearance of the employees.

We realize that this is not an easy factor to evaluate, but the above is given not in a sense of boastfulness, but to try to describe the quality of available labor in comparison with that in some other cities.

Dear Mr. Parker:

Having been transferred to Savannah approximately one year ago, I was immediately impressed with the personnel at this location. As you know, we have one of the better _____ plants in the industry which in no small way is attributable to all our personnel.

Perhaps the most striking attribute of our hourly people is the fact that they have a keen sense of competitiveness which is so necessary in any business today. Cooperation has been excellent and as a result we have been able to meet the changing requirements of our operation. Needless to say, this has made all our jobs easier.

From my observations, our plant does not have a monopoly on this type labor which appears to be prevalent throughout the Savannah area. This, I believe, is reflected in our excellent labor climate. It is true other areas offer lower rates; however, it is my opinion that the comparatively high caliber of labor available in Savannah compensates for the difference.

Note: Actual copies of these and similar letters can be furnished upon request.